

CLAIMS

1. A method of providing authentication information to a network application function, said method comprising:

receiving a request from a user equipment to provide authentication information to at least one network application function; and

providing said authentication information to at least one network application function.

2. A method according to claim 1, wherein said receiving step enables access to the network application function by the user equipment.

3. A method according to claim 1, wherein said receiving step includes receiving the request which includes at least one network application function identity.

4. A method according to claim 1, wherein said receiving step includes receiving the request which includes an identifier of at least one type of network application function.

5. A method according to claim 1, wherein said providing step includes providing the authentication information comprising bootstrapping information.

6. A method according to claim 5, wherein said receiving step includes receiving the request by a bootstrapping function.

7. A method according to claim 5, further including obtaining said bootstrapping information.

8. A method according to claim 7, wherein the step of obtaining the bootstrapping information comprises establishing an authentication procedure between the user equipment and a bootstrapping function.

9. A method according to claim 8, wherein the establishing step includes establishing a shared key within the authentication procedure between the user equipment and the bootstrapping function.

10. A method according to claim 9, further comprising basing the bootstrapping information provided to the at least one network application function on the shared key.

11. A method according to claim 9, further comprising including a transaction identifier in the bootstrapping information provided to the at least one network application function.

12. A method according to claim 9, wherein further comprising including subscriber profile information in the bootstrapping information provided to the at least one network application function.

13. A method according to claim 9, wherein said providing step includes providing the bootstrapping information to the at least one network application function that is network application function specific.

14. A method according to claim 8, wherein the step of obtaining bootstrapping information includes retrieving information from a home subscriber server.

15. A method of providing bootstrapping information to a network application function entity to enable access by a user equipment, said method comprising:

generating a request from a user equipment to provide bootstrapping information to at least one network application function entity;
receiving said request at a bootstrapping functional entity;
determining said bootstrapping information at said bootstrapping functional entity; and
transmitting said determined bootstrapping information to the at least one network application function entity.

16. A method according to claim 15, wherein said determining step includes determining said bootstrapping information in dependence on a transaction identifier included in said request.

17. A method according to claim 15, wherein said generating step includes generating the request having at least one network application function identity.

18. A method according to claim 15, wherein said generating step includes generating the request having at least one type of network application function.

19. A method according to claim 18, wherein said determining step includes determining said bootstrapping information by performing a bootstrapping operation.

20. An authentication entity, comprising:
receiving means for receiving a request from a user equipment to provide authentication information to at least one network application function entity; and
transmitting means for transmitting said authentication information to the at least one network application function entity.

21. An authentication entity according to claim 20, further including determining means for determining at least one network application function entity identity from said request.

22. An authentication entity according to claim 20, wherein the authentication information is bootstrapping information, and the authentication entity comprises a bootstrapping functional entity.

23. An authentication entity according to claim 22, further including determining means for determining said bootstrapping information.

24. An authentication entity according to claim 23, wherein the determining means for determining the bootstrapping information comprises authentication means for establishing an authentication procedure between the user equipment and a bootstrapping function.

25. An authentication entity according to claim 24, wherein the authentication means establishes a shared key.

26. An authentication entity according to claim 25, wherein the bootstrapping information provided to the at least one network application function s based on the shared key.

27. An authentication entity according to claim 25, wherein the bootstrapping information provided to the at least one network application function entity includes a transaction identifier.

28. An authentication entity according to claim 25, wherein the bootstrapping information provided to the at least one network application function entity includes subscriber profile information.

29. A user equipment configured to transmit a request to an authentication entity to provide authentication information to at least one network application function entity.

30. A user equipment according to claim 29, wherein the request is transmitted to a bootstrapping functional entity.

31. A user equipment according to claim 29, wherein the request comprises one of a transaction identifier or a network application function identity.

32. A network application function entity configured to receive unsolicited authentication information from an authentication function entity.

33. A network application function entity according to claim 32, wherein said authentication information includes bootstrapping information.

34. A network application function entity according to claim 32, wherein said authentication information is associated with a user equipment.

35. A network application function entity according to claim 34, wherein the authentication information is received from an authentication function, and wherein the authentication information is established between said authentication function and the user equipment.

36. A network application function entity according to claim 32, wherein the receipt of the authentication information from an authentication function entity is responsive to a request by a user equipment to the authentication function entity.

37. A communication system, comprising:
at least one user equipment, the user equipment includes means to transmit a request to push authentication information to at least one network application function;

at least one network application functional entity; and

a bootstrapping functional entity, the bootstrapping functional entity includes receiving means for receiving the request from the at least one user equipment and

transmitting means for transmitting said authentication information to the at least one network application function entity,

wherein the at least one network application function includes means adapted to receive unsolicited bootstrapping information from the bootstrapping function entity.

38. A system to provide bootstrapping information to a network application function entity to enable access by a user equipment, the system comprising:

generating means for generating a request from a user equipment to provide bootstrapping information to at least one network application function entity;

receiving means for receiving said request at a bootstrapping functional entity;

determining means for determining said bootstrapping information at said bootstrapping functional entity; and

transmitting means for transmitting said determined bootstrapping information to the at least one network application function entity.